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(54) Title: POLYMERIZATION PROCESS

(57) Abstract: A process for the polymerization of ethylene and optionally at least one C₃₋₂₀ alpha olefin comonomer in the slurry or solution phase in a reactor having a polymer outlet stream, a procatalyst or catalyst feed stream and a hydrogen feed stream, said polymerization being effected in the presence of a metallocene catalyst, a diluent and hydrogen, wherein said diluent is recycled from said outlet stream to said hydrogen feed stream, said procatalyst or catalyst feed stream is free of hydrogen, said hydrogen feed stream is free of procatalyst or catalyst and said procatalyst or catalyst feed stream does not comprise recycled diluent.



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